

Menstruation.

Raleigh T. Colston

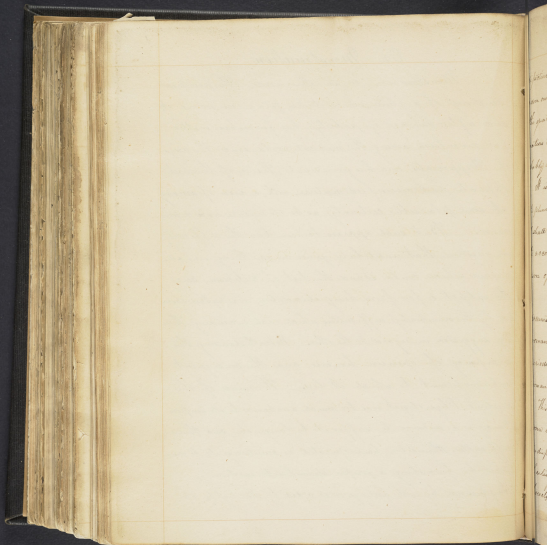
admitted March 8th 1821.

Robert T. Johnson

Admission dated Oct 1851

On Menstruation

Menstruation, or in other words, The periodical discharge of a fluid which takes place in women at, and after the age of puberty, has furnished matter for discussion among the medical world since the days of Hippocrates, and has given rise to theories of the most opposite and diversified nature, with a view of arriving at some plausible certainty as to its nature and dependence. But such appears to have been the difficulty in question, that until late years no one theory was advanced which could stand the test of criticism, and the subject is far from being elucidated, was rather obscured by the numberless difficulties which each increasing theory suggested in regard to the other. Notwithstanding this discrepancy of opinion however and the consequent embarrassment to which it led, the mind of the sagacious Physiologist was too much awakened to its importance as a subject to suffer it to languish, and these difficulties themselves have operated as counteragents to despair by furnishing a proper stimulus to exertion. Influenced by such feelings, and aided by the lights of

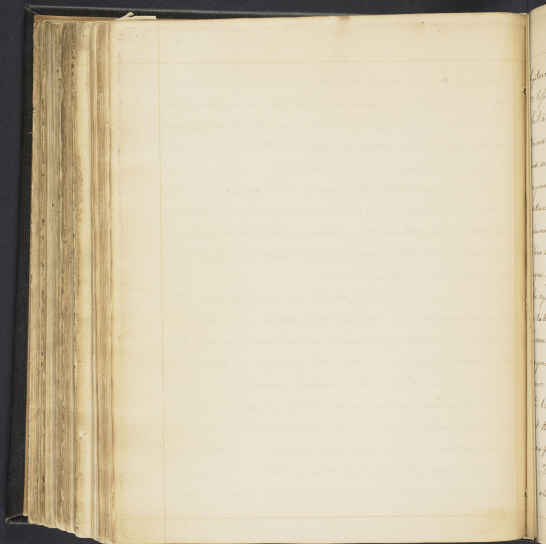


disposition, can we doubt, with the genius and talent which adorn our profession in every age, that time will unfold to us the greatest mysteries of our nature and open to our imagination those wonders which an all-wise Creator has most probably not destined to concealment?

It is my design here to commence with an account of the phenomena which take place in the discharge, after which I shall notice all the older Theories which have been framed to account for them, and lastly, advance the most modern opinions on the same.

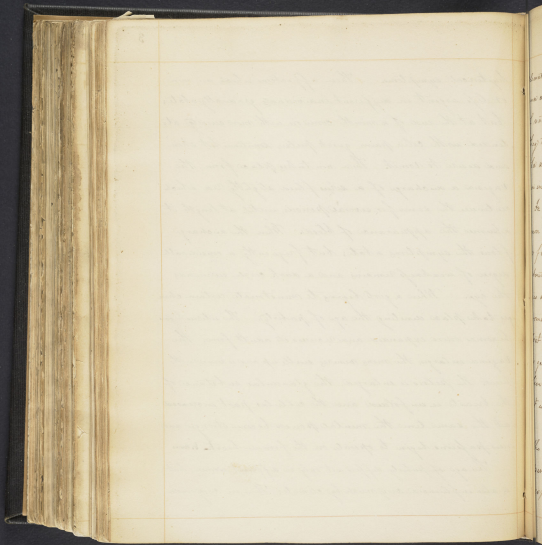
The Menses are so named from the circumstance of their occurring every month, and when the woman is in a healthy condition are marked by a minute periodical evacuation. Whilst this discharge continues the woman is said to be out of order or unwell.

This discharge always exists the age of puberty, and in some instances comes on without any previous or attendant indisposition but in most cases it is preceded by uneasy feelings, very often by affections of the stomach and bowels, pain about the back and pelvis, and various



hysterical symptoms. These affections which are more or less urgent in different individuals gradually abate; but at the end of a month come on with more severity attended with colic pain, quick pulse, sometimes hot skin and desire to vomit. Then new takes place from the vagina a discharge of a serous fluid slightly red which continues the same for several periods, until at length it assumes the appearance of blood. When the discharge flows the symptoms abate, but frequently a considerable degree of weakness remains and a dark circle surrounds the eye. When a girl begins to menstruate certain changes take place denoting the age of puberty. The uterus becomes more expanded and assumes its adult form; the vagina enlarges, the mons veneris swells up and is covered with hair; the pubis is enlarged, the glandular substance of the breasts is unfolded and the cellular part increased at the same time the mental powers become stronger and new passions begin to operate on the female heart. H. Gums

The age of puberty differs not only in different women, but is also influenced very much by climate; thus in very warm



climates, as for instance *Ovis*, the menses make their appearance as early as the ninth year, and it appears to be a law of nature that the earlier they occur in life, the sooner they take their final leave; hence women in *Ovis* are ill and infirm, while those in Europe and this country are in the prime and vigour of life.

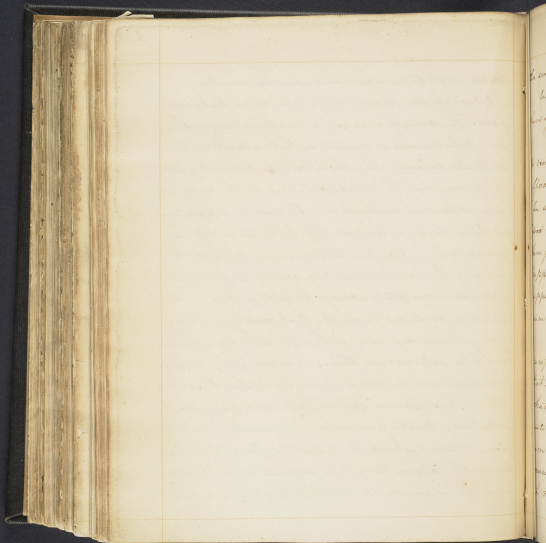
In this as in all other temperate climates the most common age at which the menses appear is that of thirteen or fourteen, and the period of life when they cease is about forty-four. The quantity of the discharge varies also according to the climate and constitution of the woman. In this country from four to six ounces are lost at each menstrual period the continuance of which is generally from three to four days, but in women who live luxuriously and are confined in warm apartments, it is more copious and continues for a much longer period.

It appears to have been the opinion of all writers on the subject of Menstruation, that the fluid expelled by the vagina is of a sanguineous kind differing in some respects from common blood; Thus Hippocrates

the first of the month of January 1841
I received from you a letter of the 21st
in which you inform me that you have
received from the Board of Directors
of the American Bible Society a
copy of the report of the same
for the year 1840. I have just
received it and have read it with
great interest. It contains many
interesting particulars of the
work of the Society during the
past year. I am glad to hear
that the Society is so successful
in its work. I am sure that
the Lord will continue to bless
its efforts.

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declare it to be when in a healthy condition
 'Blood of the purest kind, resembling that flowing
 from the vein of a sacrificer newly slain.' It is
 sometimes however so situated as to be almost rankled
 with the poison. This, they ascribe to no ill quality
 of its own, but the mixture of some fifth or contagion
given otherwise contracted. It was also supposed at
 one time to be endowed with the most detestable
 properties, fatal both to animal and vegetable
 life. Thus a menstruating woman was looked
 upon as a complete scourge to Cotapillars and
 other insects, in so much, that merely walking
 over grounds infested with these animals was suffi-
 cient to exterminate them; gardeners were extremely
 cautious in admitting a woman within their grounds
 lest their flowers should fade and their seeds be
 blasted; Vine layers, were in like manner careful
 lest their Casks should be put in fermentation, and
 many other observations of like nature which in the present
 state of our sciences bear a far more to any thing like truth than



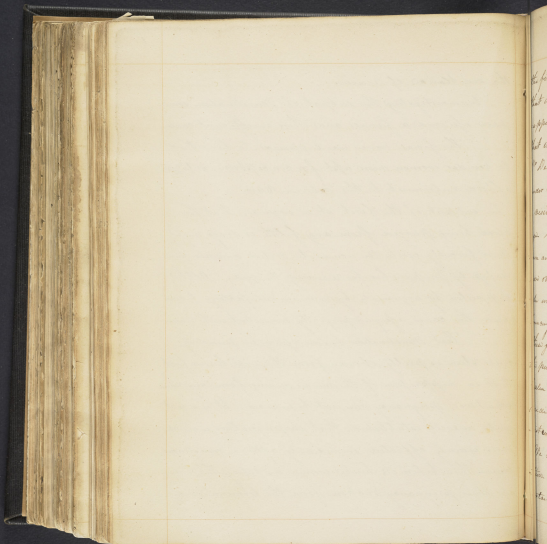
the semblance of reason.

In investigating the subject of Menstruation, some have assigned a fixed and there an efficient cause.

The fixed cause was supposed to be either to render women more apt for conception; or to afford nutriment to the Fetus in Utero.

In support of the first, it is argued. That the blood being purged from any filth or dregs might more forcibly excite the woman to coition and also more happily prepare her for receiving the seed. Altho' supported by arguments by no means satisfactory, & conceived the cause a figure perfectly consistent with reason.

That Menstruation has an agency in promoting conception is pretty obvious from the well known fact that in suppression of the menses arising from any cause whatever, pregnancy can not be induced. It is a fact quite as well established, that impregnation is much more readily effected, immediately after a menstrual course than before it; hence women in dating the period of their pregnancy reckon from the termination of

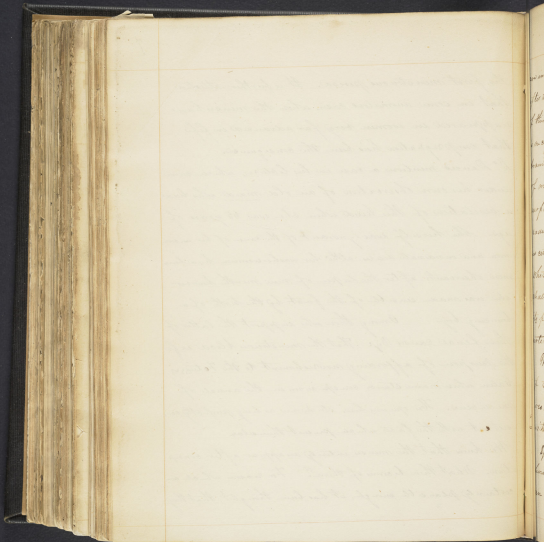


the first menstuous period. It is further attested that in some anomalous cases, where the menses have reappeared in women very far advanced in life that impregnation has been the consequence.

L^r Deveraux mentions a case in his lectures, which came under his own observation of an old maid who had a revulsion of this kind when she was 65 years of age. She herself was ignorant of the cause of her uncommon and inordinate desire, altho her washerwoman had been some servants after the lapse of nine months however she was made aware of the fact by the birth of a bouncing boy.

Among those who support the latter of these female causes viz: That the menstuous blood is for the purpose of affording nourishment to the Fetus, is Galen whose name stands conspicuous in the annals of medicine. His opinion here, strikes me as being perfectly consistent with the facts which present themselves.

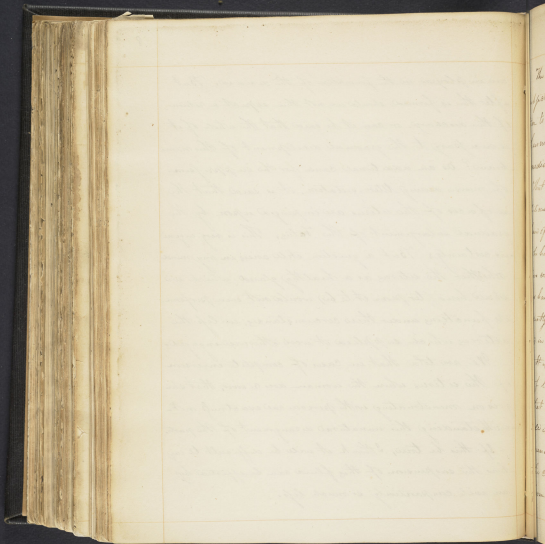
We know that the menses entirely disappear after conception. What then becomes of them? For reasons which are certainly plain & obvious enough, it has been thought that they



are employed in the formation of the os cernua. But after this is formed, should we not then expect a return of this discharge, or can it be said that the whole of it is made part to the gradual development of the membrane? As an additional cause for the suppression of menses during Menstruation, it is said that the surfaces of the uterus are impinged upon by the gradual enlargement of the Fallopian. This is very ingenious certainly! But a question still arises in my mind whether the uterus as a healthy gland (which we shall hereafter prove it to be) would not even perform its functions under these circumstances, unless the arteries which supplied it were otherwise engaged.

We are told that in cases of complete inversion of the uterus when the woman does recover, that she goes on menstruating with periodic exactness notwithstanding this unnatural arrangement of the parts.

If this be true, I think it will be difficult to say how the suspension of this fluid can be effected by an evil comparatively so much less.



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The least exceptionable opinion, in my mind, on this subject is; That the arteries which supplied this secretion to the living before conception, ~~errors~~ engaged in furnishing nourishment to the embryo through the medium of the placenta and Umbilicus.

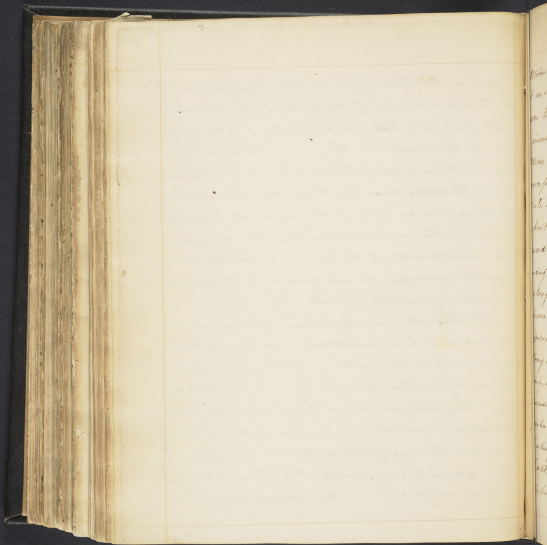
That the Fetus is nourished through the medium of the umbilicus is rendered extremely probable from the accounts on hand of monstrous births without heads, and some infants who have had no passage at the mouth and nose, and therefore could not have been nourished by the liquor amnii as has been supposed. There is another circumstance which greatly strengthens the idea, that the mother draws on again in some way or other ⁱⁿ ~~by~~ giving nourishment to the Fetus.

It is I believe generally conceived that during the period of lactation there is a suspension of this discharge, and that as soon as the child is weaned, it returns again with all its former regularity. In some cases however women menstruate during this period; whenever this is the case the child is found to thrive and not derive much benefit from its milk.

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Many are the Theories which have been framed to account for the efficient cause of Menstruation. The one I shall first speak of is that which attributes it to the influence of the moon. This Theory was countenanced by Dr Barwin. It was supposed that the period of the flux answered the moon's course, and therefore that it was directed by its influence. This has been very correctly answered, That if the moon influenced this flux, all women in the same climate, of the same age & constitution, would have their menses in the same time and at the same season, which is certainly in error.

The Physicians in ascribing a cause to menstruation declare it to be a fermentation, which some of them continued to be diffused throughout the whole mass of blood, while others assert that it is peculiar to the uterus. They all agree however however that this ferment is seated in some certain salts which by their motions agitate the mass of blood that at some certain seasons, namely every month it is thrown into a violent effervescence and such a passage through the



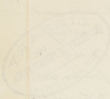
Uterine vesicle. This carries ^{so} much absurdity with it as scarcely to deserve a comment. I should only observe that such a condition of things would not only produce a diseased state of the fluids of the uterus, but also of the uterus itself, and the menses are known to be a healthy process. — Brown refers it entirely to the lascivious state which he thinks is incident to the female mind about the age of puberty, and instances have been adduced to show the agency of the imagination in producing this discharge; but this is offering too great an outrage to the purports and delicacy of feeling which characterizes the sex. We must have been wanting in experience and observation, if he were ignorant that any strong and sudden impression made upon the mind as joy, grief, astonishment, fear &c. operate as disturbances in this disease, and the cases on which he founded his Theory were probably nothing more than the influence of one of these feelings. There is an interesting case illustration of this fact related by Dr Lewis. A young lady of this city, who had been afflicted for some length of time with suppression of

the mouse, after baffling the chase of some of the most eminent physicians was at length sent into the country—
 through an orchard she stooped down to take up a piece of fruit
 to knock down an apple; upon removing it she found ^{in the} inside
 and (as was very natural to one so unaccustomed to the sight of
 this unpleasant animal) became exceedingly frightened. Her
 Muses which had resisted the persuasion of the best reasons
 for so long a time, immorality began to flow and over-
 towards observed its periodical regularity—so it to be suppo-
 ne that the appearance of this loathsome creature could excite
 in this young lady's breast anything like lascivious ideas!!

Cullen also endeavoured to account for it by his Theory
 of Local Congestion. He argued, that the upper extrem-
 ities as being most essential in the economy of life were
 first completed, that afterwards viz: about the age of puber-
 ty, the blood was determined to the lower extremities;
 that the limbs being thus stimulated made an effort to throw
 off its burden by what he styles an hemorrhagic effort.

These Theories I believe for want of facts to support them are
 nearly exploded.





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The last of these Theories I shall mention is that of Galen who attributes the efficient cause of Mordination to plethora. He says, That nature causes an evacuation in all women by throwing off every month the superfluous blood. That the female is in as much as they heap up a greater quantity of humors by living continually at home and not being used to hard labour or exposed to the heat of the sun. To cure a discharge of this fullness is a remedy of nature.

Many have been the advocates to this doctrine both of the ancient and modern schools, and many have been the arguments in support of its plausibility.

D^r Friend in his work on Gynaecologia speaks of it as the only rational manner of explaining the phenomena, and he might speak the language of all his contemporaries. He lays down two general principles from which he draws his deductions. First: That every body remains the same if the Evacuation be equal to the action and vice versa. Secondly: That if any eruption of Polioa happen to any animal periodically and the same state should return after the Eruption as existed at the commencement of the period.

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so that the animal be neither more or less porous; that
 then a pt. there must have existed in that animal before
 the eruption, and further that all evacuating mads before
 the eruption were unequal to the addition but equal to it
 if taken in conjunction with the periodical flux.

But how into the application of these principles answer
 in cases of Men, in whom it must be confessed the very
 same state of things exists, without the kindly interposi-
 tion of a periodical evacuation? This question he appears to have
 anticipated, by attempting to prove that the excretions in
 women are less than them in men; that the excretion
 of perspiration which he continues to consume more of the
 element than any other, is so much less in women than
 in men in consequence of the difference in their habits
 and occupations as to produce plethora - How then let
 me ask, does he account for the appearance of this dis-
 charge in women who are employed as Cooks and then when
 vacations leave them to the most active life, when it must
 be confessed, perspiration flows with the same profusion
 as in men, without causing any diminution in the menstrual

The first thing I noticed when I stepped
out of the car was the cold air. It was
a sharp contrast to the warm blanket
of the car. I shivered slightly, but
the cold was invigorating. I took a
deep breath and felt the crispness of
the air fill my lungs. The sun was
just beginning to rise, casting a
soft glow over the landscape. The
trees were bare, their branches reaching
up towards the sky. The ground was
covered in a thin layer of snow, and
the air was filled with the scent of
fresh snow. I felt a sense of peace
and tranquility. It was a beautiful
start to a new day.

evacuations? Or in some of men who live continually in
rich inhabitable climates where perspiration is not easily
induced. Must it not follow that the same plethora must
exist in them, which would call upon nature for the
same mode of relief? This I believe is not found to be
the case. If we be a fools, plethora is to be debated in
women by its pendue how is he to discover it in women
who are very spare and delicate, in whom it is shown that
the flux is more profuse than in those of a more robust habit.

It is difficult indeed to reconcile these facts with
the doctrine of plethora. It is therefore nothing more than
a rational conjecture, that since the observations of
moderate men have opened our eyes to a new and unantici-
pated function which is a signal to this view, that this as
well as all other opinions founded upon false premises
would lose in oblivion all, save a respect for the talent &
ingenuity which gave them birth.

I am now to take a different view of the subject
and speak of the Uterus as a highly finished & well
organized gland, and this much debated fluid nothing

Mr Hunter was the first & others in England.
Haller however has the claim of priority in this discovery.

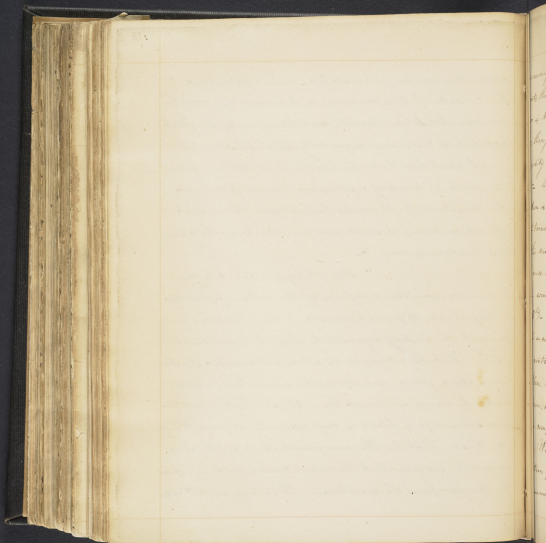
more than a simple secretion. Who was entitled to the credit of this discovery is I believe not correctly known. Mr John Hunter was certainly among the first and to him I believe it is generally attributed.

I must here take the liberty of extracting from the work of our very ingenious and learned professor Dr Chapman the remarks he makes on this subject by which many I shall feel an assurance that ample justice is done it.

"It is not my intention to enter into a formal exposition or defence of the doctrine of Secretion

My object at present is merely to bring forward a summary of the leading arguments by which it is maintained

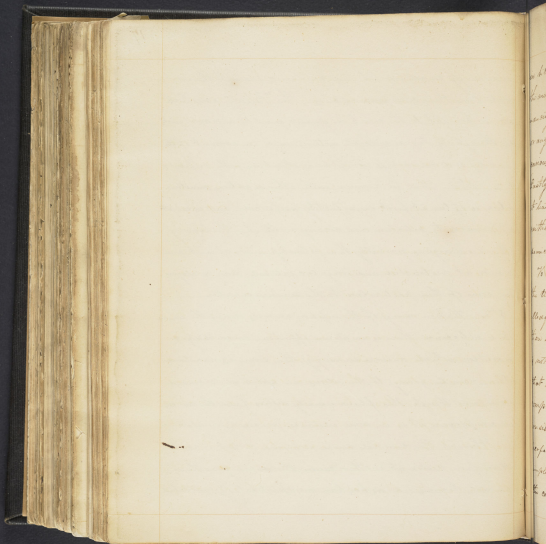
1st That the uterus in its cellular and vascular structure resembles a gland, and also in its diseases, being equally liable to scirrhus and cancer &c. 2^{ly} That like other secreting organs blood is very copiously diffused through it. 3^{ly} That by the arrangement of its vessels it is evidently designed, that the circulation should be retained for the purpose of secretion. The arteries are not only



is evidently convoluted, but they are larger, and with thinner coats than their corresponding veins. The "Blood", says Haller, is brought to the womb in greater quantity and more quickly through its large and ample arteries, and, on account of the rigidity and narrowness of the veins it returns with difficulty. 4th. That in common with other secretory menstruation is of two at first imperfectly performed, and is subject afterwards to variation and derangement. In the beginning the discharge is generally thin, colorless, and copious, and occurs at protracted and irregular intervals, being analogous in some of these particulars to the seminal secretion.

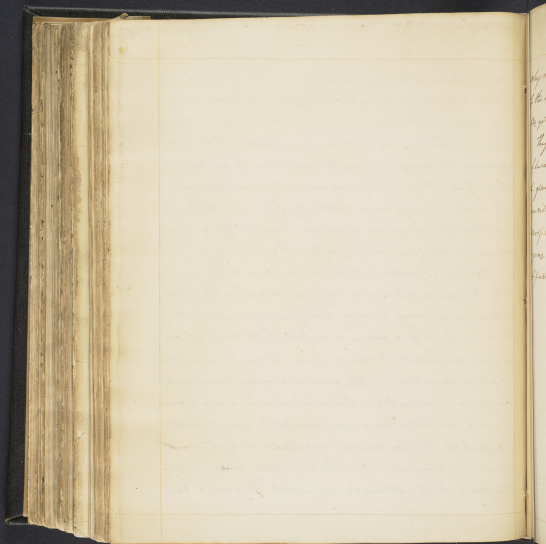
5th. That in many of the inferior animals during the season of incubation, there is an uterine effusion, undoubtedly a secretion which answers seemingly, the same end as menstruation, namely, giving to the uterus an aptitude to conception, and though this fluid usually differs from the menses in complexion it is in some instances precisely similar.

Whenever the menstrual discharge suffers a violent excitation from restraint or other causes the discharge in these animals becomes red as they have more particularly remarked



in betaking him to the male. 6. That when the menses are suppressed, they can not be restored by increasing plethora, nor the flow checked by venesection or any other means of depletion, besides which mercurious discharge relieves the symptoms of suppression. Lastly - That the menses are a fluid sanguineous, or at least, varying imperceptibly from blood, having neither its colour, nor odour, nor coagulability, and on chemical analysis present different results.

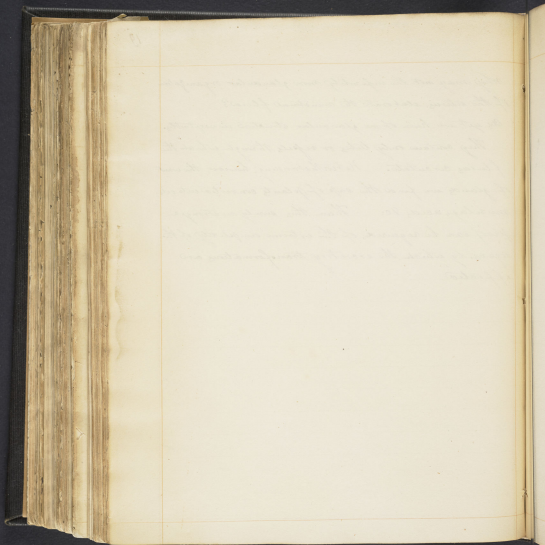
To the objection which has sometimes been urged, that the uterus is not sufficiently glandular for the office alluded to, it may be very satisfactorily replied, that there is hardly a viscus, or surface of the body, which is not competent to this purpose. It would really seem that no operation of the animal economy requires a so complex apparatus. Of what nature does a gland consist, except a congeries of vessels? Even the most perfect of the excretions are accomplished by this simple contrivance. If the few vessels sweeping through the coats of the stomach can secrete the gastric liquor



Why may not the infinitely more glandular organization
of the uterus, elaborate the menstrual fluids?

As yet we know of no glandular structure in vegetables.

They contain only tubes or vessels through which the
fluids circulate. Notwithstanding, however, the want
of glands we find the sap of plants converted into oils,
mucilage, acids &c. Than this surely no stronger
proof can be required, of the extreme simplicity of the
organs, by which the secretory transformations are
effected.



Thompson's

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